

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Little II, Roger G.
Lim, Edward
Fadem, Mitchell B.

(ii) TITLE OF INVENTION: Anti-Fungal Peptides

(iii) NUMBER OF SEQUENCES: 211

(iv) CORRESPONDENCE ADDRESS:

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(B) STREET: 500 West Madison Street, 34th Floor Drive
(C) CITY: Chicago
(D) STATE: Illinois
(E) COUNTRY: United States of America
(F) ZIP: 60661

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: Patent In Release #1.0, Version #1.25

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/372,105
(B) FILING DATE: 13-JAN-95

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/306,473
(B) FILING DATE: 15-SEP-94

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/273,540
(B) FILING DATE: 11-JUL-94

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/209,762
(B) FILING DATE: 11-MAR-94

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/183,222
(B) FILING DATE: 14-JAN-94

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/093,202
(B) FILING DATE: 15-JUL-93

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: 08/030,644
(B) FILING DATE: 12-MAR-93

(viii) ATTORNEY/AGENT INFORMATION:

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(2) INFORMATION FOR SEQ ID NO:1:

- ```

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 22 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.5"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

Val His Val His Ile Ser Lys Ser Lys Val Gly Trp Leu Ile Gln Leu  
1 5 10 15  
Phe His Lys Lys Ile Glu  
20

(2) INFORMATION FOR SEQ ID NO:2:

- ```

(i) SEQUENCE CHARACTERISTICS:
  (A) LENGTH: 13 amino acids
  (B) TYPE: amino acid
  (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
  (A) NAME/KEY: misc_feature
  (D) OTHER INFORMATION: "XMP.11"

(ix) FEATURE:
  (A) NAME/KEY: Modified-site
  (B) LOCATION: C-Terminus
  (D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Lys Ser Lys Val Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 29 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.12"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Ser	Val	His	Val	His	Ile	Ser	Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln
1				5					10					15	
Leu	Phe	His	Lys	Lys	Ile	Glu	Ser	Ala	Leu	Arg	Asn	Lys			
			20					25							

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.13"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys
1				5				10					

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.29"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Lys Ser
 1 5 10 15
 Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 20 25

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.31"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Ala Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.32"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Lys Ala Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.33"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Lys Ser Ala Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.34"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

Lys Ser Lys Ala Gly Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.35"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

Lys Ser Lys Val Ala Trp Leu Ile Gln Leu Phe His Lys Lys

- (ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

Lys Ser Lys Val Gly Trp Leu Ala Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:14:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.39"

- (ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

Lys Ser Lys Val Gly Trp Leu Ile Ala Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:15:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.40"

- (ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:16:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.41"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Ala	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.42"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	Ala	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.43"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Ala Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.44"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.55"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Gly Trp Leu Ile Gln Leu Phe His Lys Lys Ile Glu Ser Ala Leu Arg
1 5 10 15

Asn Lys Met Asn Ser
20

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.82"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Trp	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.83"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10..12
- (D) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Lys	Ser	Lys	Val	Gly	Ala	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "KMP.85"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

Lys Ser Lys Val Leu Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.86"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.37"

(ix) FEATURE:

(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Leu Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.91"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.92"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

Lys Ser Lys Val Gly Trp Leu Ile Lys Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.94"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Phe Lys Lys

1 5 10

(2) INFORMATION FOR SEQ ID NO:29:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.95"

- (ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:30:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.96"

- (ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Phe
 1 5 10

(2) INFORMATION FOR SEQ ID NO:31:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.97"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

Lys Ser Lys Val Lys Trp Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.100"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

Lys Ser Lys Val Lys Trp Leu Ile Lys Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 23 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.101"

(ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

Lys Ser Lys Val Lys Trp Leu Ile Lys Leu Phe Phe Lys Phe Lys Ser
 1 5 10 15

Lys Val Lys Trp Leu Ile Lys Leu Phe Phe Lys Phe
 20 25

(2) INFORMATION FOR SEQ ID NO:34:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.104"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Ser	Leu	Phe	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:35:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.106"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

Lys	Ser	Lys	Val	Gly	Trp	Leu	Ile	Thr	Leu	Phe	His	Lys	Lys
1				5					10				

(2) INFORMATION FOR SEQ ID NO:36:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.107"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Trp Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.108"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Trp
1 5 10

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.109"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 11
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 11 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Ala His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:39:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Ala Lys Lys
1 5 10

[illegible]

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Ala
1 5 10

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 14 amino acids
(B) TYPE: amino acid

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe
/note= "The phenylalanine at position 9 is
p-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.124"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

Lys Ser Lys Val Lys Trp Leu Ile Gln Leu Trp His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.125"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

Lys Ser Lys Val Gly Trp Leu Ile Tyr Leu Phe His Lys Lys

1

5

10

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.126"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= D-Trp
/note= "Position 6 is D-tryptophan."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.127"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

Lys Ser Lys Val Gly Phe Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.128"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= D-Phe
/note= "Position 6 is D-phenylalanine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

Lys Ser Lys Val Gly Phe Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.129"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is D-1-beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.130"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 5 is beta-2-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

- (2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.131"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 6
 - (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is D-beta-2-naphthyl-substituted."

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: C-Terminus
 - (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

- (2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 14 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (D) OTHER INFORMATION: "XMP.132"

```
(A) NAME/KEY: Modified-site
(3) LOCATION: 6
(C) OTHER INFORMATION: /label= Substituted-Ala
                      /note= "The alanine at position 6 is
                              pyridyl-substituted."
```

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.133"

(A) NAME/KEY: Modified-site
(B) LOCATION: 6
(C) OTHER INFORMATION: /label= Substituted-Phe
/note= "Position 6 is para-amino-substituted."

```
(A) NAME/KEY: Modified-site
(B) LOCATION: C-Terminus
(D) OTHER INFORMATION: /label= Amidation
                        /note= "The C-Terminus is Amidated"
```

Lys Ser Lys Val Gly Phe Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(A) NAME/KEY: misc feature
(D) OTHER INFORMATION: "CMP.134"

(A) NAME/KEY: Modified-site

[illegible]

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.135"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

Lys Ser Lys Val Gly Lys Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 16 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: circular

```
(ix) FEATURE:
      (A) NAME/KEY: misc_feature
      (D) OTHER INFORMATION: "XMP.137"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

Cys Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Cys
1 5 10 15

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.138"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

Lys Ser Lys Val Lys Phe Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.139"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

Lys Ser Lys Val Gly Tyr Leu Ile Gln Leu Phe His Lys Lys
 1 5 10

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.142"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

(2) INFORMATION FOR SEQ ID NO:60:

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: 10
      (C) OTHER INFORMATION: /label= Substituted-Ala
                           /note= "Position 10 is beta-1-naphthyl-substituted."
```

[illegible]

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:
(A) NAME/KEY: misc_feature
(D) OTHER INFORMATION: "XMP.144"

[illegible]

```
(ix) FEATURE:
      (A) NAME/KEY: Modified-site
      (B) LOCATION: C-Terminus
      (D) OTHER INFORMATION: /label= Amidation
```

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.146"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 14
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 14 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe Ala Lys Ala
1 5 10

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (D) OTHER INFORMATION: "XMP.148"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

[illegible]

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe Ala Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "KMP.161"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

Lys Ser Lys Val Lys Ala Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

(ix) FEATURE:
 (A) NAME/KEY: misc feature
 (D) OTHER INFORMATION: "XMP.165"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

Lys Ser Lys Val Gly Val Leu Ile Gln Leu Phe His Lys Lys
1 5 10

(2) INFORMATION FOR SEQ ID NO:55:

- ```
(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 14 amino acids
 (B) TYPE: amino acid
 (D) TOPOLOGY: linear

ii) MOLECULE TYPE: peptide

ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.222"

ix) FEATURE:
 (A) NAME/KEY: Modified-site.
 (B) LOCATION: 6 & 14
 (C) OTHER INFORMATION: /label= Substituted-Ala
 /note= "Positions 6 and 14 are beta-1-naphthyl-substituted."

ix) FEATURE:
 (A) NAME/KEY: Modified-site
 (B) LOCATION: C-Terminus
 (D) OTHER INFORMATION: /label= Amidation
 /note= "The C-Terminus is Amidated"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.224"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Lys | Val | Gly | Ala | Leu | Ile | Phe | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

(2) INFORMATION FOR SEQ ID NO:69:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.225"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

Lys Ser Lys Val Phe Ala Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.226"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 6 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.227"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10 & 14
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Positions 10 & 14 are beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe His Lys Ala

1

5

10

## (2) INFORMATION FOR SEQ ID NO:72:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.223"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 14
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 14 is beta-1-naphthyl-substituted."

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Ala  
 1                      5                      10

## (2) INFORMATION FOR SEQ ID NO:73:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.229"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 5 is para-amino-substituted."

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 14
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 14 is beta-1-naphthyl-substituted."



- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe His Lys Ala  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:74:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.230"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 14
  - (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 14 is beta-1-naphthyl-substituted."

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Trp His Lys Ala  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:75:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.231"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 10 & 12
  - (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Positions 10 & 12 are beta-1-naphthyl-substituted."

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Phe Ala Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.232"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 12
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe Ala Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.233"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 12  
 (C) OTHER INFORMATION: /label= Substituted-Ala  
 /note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Phe Ala Lys Lys -  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.234"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 12  
 (C) OTHER INFORMATION: /label= Substituted-Ala  
 /note= "Position 12 is beta-1-naphthyl-substituted."

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Trp Ala Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.235"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 9

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(C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 10  
(C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

Lys Ser Lys Val Gly Trp Leu Ile Phe Ala Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.236"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 5  
(C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 10  
(C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

Lys Ser Lys Val Phe Trp Leu Ile Gln Ala Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.237"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 10
- (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 10 is beta-1-naphthyl-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

Lys Ser Lys Val Gly Trp Leu Ile Gln Ala Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.238"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

Lys Ser Lys Val Phe Trp Leu Ile Phe Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.239"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 9
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 9 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.240"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Position 5 is para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

Lys Ser Lys Val Phe Trp Leu Ile Gln Leu Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

```
(ix) FEATURE:
```

|     |                                                                             |
|-----|-----------------------------------------------------------------------------|
| (A) | NAME/KEY: Modified-size                                                     |
| (B) | LOCATION: C-Terminus                                                        |
| (D) | OTHER INFORMATION: /label= Amidation<br>/note= "The C-Terminus is Amidated" |

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Trp His Lys Lys  
1 5 10

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ix) FEATURE:  
 (A) NAME/KEY: misc feature  
 (D) OTHER INFORMATION: "XMP.242"

[illegible]

Lys Ser Lys Val Gly Ala Leu Ile Leu Leu Phe His Lys Lys  
1 5 10

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.243"
```

(C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 6 is D-beta-2-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.244"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "Position 6 is D-beta-2-naphthyl-substituted."

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

Lys Ser Lys Val Gly Ala Leu Ile Leu Leu Trp His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.249"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.250"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

Lys Ser Lys Val Gly Leu Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.251"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

Lys Ser Lys Val Gly Ile Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.252"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /label= D-Ala  
/note= "Position 6 is D-alanine"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

## (2) INFORMATION FOR SEQ ID NO:93:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.253"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 6
- (D) OTHER INFORMATION: /label= D-Val  
/note= "Position 6 is D-valine"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

Lys Ser Lys Val Gly Val Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

## (2) INFORMATION FOR SEQ ID NO:94:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.254"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 6  
 (D) OTHER INFORMATION: /label= beta-Ala  
 /note= "Position 6 is beta-alanine"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.255"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 6  
 (D) OTHER INFORMATION: /label= alpha-aba  
 /note= "Position 6 is alpha-aminobutyric acid"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

Lys Ser Lys Val Gly Xaa Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.256"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 6

(D) OTHER INFORMATION: /label= gaba  
/note= "Position 5 is gamma-aminobutyric acid"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

Lys Ser Lys Val Gly Xaa Leu Ile Gln Leu Phe His Lys Lys  
1                      5                      10

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.257"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /label=  $\alpha$ -methyl-A  
/note= "Position 6 is alpha-Methyl-alanine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

Lys Ser Lys Val Gly Ala Leu Ile Gln Leu Phe His Lys Lys  
1                      5                      10

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.253"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /label= t-butyl-G  
/note= "Position 6 is tert-butyl-glycine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:99:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.259"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 6
  - (D) OTHER INFORMATION: /label= N-methyl-G  
/note= "Position 6 is N-Methyl-glycine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

Lys Ser Lys Val Gly Gly Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:100:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.260"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 5
  - (D) OTHER INFORMATION: /label= N-methyl-V  
/note= "Position 5 is N-Methyl-valine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

Lys Ser Lys Val Gly Val Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.261"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 6  
(D) OTHER INFORMATION: /label= N-methyl-L  
/note= "Position 6 is N-Methyl-leucine"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

Lys Ser Lys Val Gly Leu Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 14 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.262"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

Lys Ser Lys Val Gly Trp Leu Ile Asn Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:103:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.263"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

Lys Ser Lys Val Gly Trp Leu Ile Glu Leu Phe His Lys Lys  
1                      5                      10

(2) INFORMATION FOR SEQ ID NO:104:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.264"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

Lys Ser Lys Val Gly Trp Leu Ile Asp Leu Phe His Lys Lys  
1                      5                      10

(2) INFORMATION FOR SEQ ID NO:105:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 14 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.265"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

Lys Ser Lys Val Gly Trp Leu Ile Arg Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.266"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

Lys Ser Lys Val Lys Val Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.267"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

Lys Ser Lys Val Lys Trp Ala Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide



(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.253"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

Lys Ser Lys Val Gly Val Ala Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 14 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.269"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

Lys Ser Lys Val Lys Val Ala Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 28 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.270"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys Lys Ser  
 1 5 10 15

Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys  
 20 25

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.271"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

Lys Ser Lys Val Gly Trp Leu Ile Gln Leu Phe His Lys Lys Lys Ser  
 1 5 10 15

Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys  
 20 25

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.272"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

Lys Ser Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys Lys Ser  
 1 5 10 15

Lys Val Gly Trp Leu Ile Leu Leu Phe His Lys Lys  
 20 25

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.273"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Lys | Val | Gly | Trp | Leu | Ile | Phe | Leu | Phe | His | Lys | Lys | Lys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Gly | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 23 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.274"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Lys | Val | Gly | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys | Lys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Gly | Trp | Leu | Ile | Phe | Leu | Phe | His | Lys | Lys |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 28 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.275"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

Lys Ser Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys Lys Ser  
 1 5 10 15  
 Lys Val Gly Trp Leu Ile Phe Leu Phe His Lys Lys  
 20 25

## (2) INFORMATION FOR SEQ ID NO:116:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.283"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

Lys Ser Lys Val Lys Phe Leu Ile Lys Leu Phe His Lys Lys  
 1 5 10

## (2) INFORMATION FOR SEQ ID NO:117:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 13 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.284"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

Ser Lys Val Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

## (2) INFORMATION FOR SEQ ID NO:118:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 12 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"
- (D) OTHER INFORMATION: "XMP.285"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:
- |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Lys | Val | Lys | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys |
| 1   |     |     |     | 5   |     |     |     |     |     | 10  |     |
- (2) INFORMATION FOR SEQ ID NO:119:
- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 12 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.286"
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:
- |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Lys | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     |     | 10  |     |
- (2) INFORMATION FOR SEQ ID NO:120:
- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 11 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.287"
- (ix) FEATURE:  
 (A) NAME/KEY: Modified-site

- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

Ser Lys Val Lys Trp Leu Ile Gln Leu Phe His  
1 5 10

(2) INFORMATION FOR SEQ ID NO:121:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 11 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.288"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

Lys Val Lys Trp Leu Ile Gln Leu Phe His Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:122:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 11 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.289"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

Val Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:123:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.290"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

Ser Lys Val Lys Trp Leu Ile Gln Leu Phe  
1 5 10

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 10 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.291"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

Lys Val Lys Trp Leu Ile Gln Leu Phe His  
1 5 10

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 10 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.292"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

Val Lys Trp Leu Ile Gln Leu Phe His Lys

12345678910

1

5

10

## (2) INFORMATION FOR SEQ ID NO:126:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.293"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |

## (2) INFORMATION FOR SEQ ID NO:127:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.294"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

|     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Lys | Val | Lys | Trp | Leu | Ile | Gln | Leu |
| 1   |     |     |     | 5   |     |     |     |     |

## (2) INFORMATION FOR SEQ ID NO:128:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.295"



(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

Lys Val Lys Trp Leu Ile Gln Leu Phe  
 1 5

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc feature  
 (D) OTHER INFORMATION: "XMP.296"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

Val Lys Trp Leu Ile Gln Leu Phe His  
 1 5

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc feature  
 (D) OTHER INFORMATION: "XMP.297"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

Lys Trp Leu Ile Gln Leu Phe His Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids

(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.298"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.299"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

Ser Lys Val Lys Trp Leu Ile Gln  
1 5

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 8 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.300"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

Lys Val Lys Trp Leu Ile Gln Leu  
1 5

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.301"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

Val Lys Trp Leu Ile Gln Leu Phe  
1 5

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.302"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

Lys Trp Leu Ile Gln Leu Phe His  
1 5

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.303"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

Trp Leu Ile Gln Leu Phe His Lys  
1 5

## (2) INFORMATION FOR SEQ ID NO:137:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 8 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.304"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

Leu Ile Gln Leu Phe His Lys Lys  
1 5

## (2) INFORMATION FOR SEQ ID NO:138:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 7 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.305"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

Ser Lys Val Lys Trp Leu Ile  
1 5

## (2) INFORMATION FOR SEQ ID NO:139:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.306"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:
 

Lys Val Lys Trp Leu Ile Gln  
1 5

## (2) INFORMATION FOR SEQ ID NO:140:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.307"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:
 

Val Lys Trp Leu Ile Gln Leu  
1 5

## (2) INFORMATION FOR SEQ ID NO:141:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.308"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation

Lys Trp Leu Ile Gln Leu Phe  
1 5

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.309"
```

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

Trp Leu Ile Gln Leu Phe His  
1 5

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "KMP.310"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

Leu Ile Gln Leu Phe His Lys  
1 5

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.311"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

Ile Gln Leu Phe His Lys Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 6 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.312"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

Ser Lys Val Lys Trp Leu  
 1 5

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 6 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.313"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

Lys Val Lys Trp Leu Ile  
 1 5

147

## (2) INFORMATION FOR SEQ ID NO:147:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 6 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.314"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

Val Lys Trp Leu Ile Gln  
1 5

## (2) INFORMATION FOR SEQ ID NO:148:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 6 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.315"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

Lys Trp Leu Ile Gln Leu  
1 5

## (2) INFORMATION FOR SEQ ID NO:149:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 6 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.316"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site



(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

(2) INFORMATION FOR SEQ ID NO:150:

(ii) MOLECULE TYPE: peptide

[illegible]

Leu Ile Gln Leu Phe His  
1 5

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 6 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

[illegible]

Ile Gln Leu Phe His Lys  
1 5

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 6 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.319"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

Gln Leu Phe His Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 5 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.320"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

Trp Leu Ile Gln Leu  
1 5

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 6 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.321"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

Trp Leu Ile Gln Leu Lys

150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

1

5

## (2) INFORMATION FOR SEQ ID NO:155:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.322"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:
 

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| Trp | Leu | Ile | Gln | Leu | Lys | Lys |
| 1   |     |     |     | 5   |     |     |

## (2) INFORMATION FOR SEQ ID NO:156:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 7 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.323"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:
 

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Gln | Leu | Lys |
| 1   |     |     |     | 5   |     |     |

## (2) INFORMATION FOR SEQ ID NO:157:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 8 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.324"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

Lys Trp Leu Ile Gln Leu Lys Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 7 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc feature  
 (D) OTHER INFORMATION: "XMP.325"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

Lys Lys Trp Leu Ile Gln Leu  
 1 5

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 8 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc feature  
 (D) OTHER INFORMATION: "XMP.326"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

Lys Lys Trp Leu Ile Gln Leu Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.327"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

Lys Lys Trp Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 4 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.330"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

Trp Leu Ile Gln  
1

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.331"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

Lys Lys Trp Leu Ile Gln Leu Lys Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.332"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1-9  
 (D) OTHER INFORMATION: /label= D-Amino Acids  
 /note= "Positions 1-9 are D-amino acids"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

Lys Lys Leu Gln Ile Leu Trp Lys Lys  
 1 5

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 9 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.333"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1  
 (D) OTHER INFORMATION: /label= D-Lys  
 /note= "Position 1 is D-lysine"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

Lys Lys Trp Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.334"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /label= D-Pro  
/note= "Position 1 is D-proline"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

Pro Lys Trp Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.335"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

Pro Lys Trp Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:167:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.335"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

Arg Arg Trp Leu Ile Gln Leu Arg Arg  
1 5

## (2) INFORMATION FOR SEQ ID NO:168:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.337"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

His His Trp Leu Ile Gln Leu His His  
1 5

## (2) INFORMATION FOR SEQ ID NO:169:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.338"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1, 2, 8 & 9
- (D) OTHER INFORMATION: /label= Orn



/note= "Positions 1, 2, 8 & 9 are Ornithine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

Xaa Xaa Trp Leu Ile Gln Leu Xaa Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.339"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1, 2, 8 & 9
  - (D) OTHER INFORMATION: /label= Dbu  
/note= "Positions 1, 2, 8 & 9 are Diaminobutyric acid"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

Xaa Xaa Trp Leu Ile Gln Leu Xaa Xaa  
1 5

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.340"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1, 2, 8 & 9
  - (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "Positions 1, 2, 8 & 9 are para-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

Phe Phe Trp Leu Ile Gln Leu Phe Phe  
1 5

(2) INFORMATION FOR SEQ ID NO:172:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.341"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1, 2, 8 & 9
  - (C) OTHER INFORMATION: /label= Substituted-Ala  
/note= "The alanine at positions 1, 2, 8 & 9 is  
pyridyl-substituted."

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

Ala Ala Trp Leu Ile Gln Leu Ala Ala  
1 5

(2) INFORMATION FOR SEQ ID NO:173:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 9 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.342"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1, 2, 8 & 9
  - (D) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1, 2, 8 & 9 are D-lysine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus

(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

Lys Lys Trp Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.343"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

Lys Lys Val Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "XMP.344"

(ix) FEATURE:  
(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

Lys Lys Trp Ala Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 9 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.345"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

Lys Lys Trp Leu Ile Gln Ala Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.346"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 3
- (C) OTHER INFORMATION: /label= Substituted-Phe  
/note= "The phenylalanine at position 3 is  
p-amino-substituted."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

Lys Lys Phe Leu Ile Gln Leu Lys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.347"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site

[illegible]

Lys Lys Ala Leu Ile Leu Leu Lys Lys  
1 5

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 10 amino acids  
(B) TYPE: amino acid  
(D) TOPOLOGY: linear

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.348"

[illegible]

Lys Lys Lys Trp Leu Ile Gln Leu Lys Lys  
1 5 10

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

```
(ix) FEATURE:
 (A) NAME/KEY: misc_feature
 (D) OTHER INFORMATION: "XMP.349"
```

[illegible]

Lys Lys Trp Leu Ile Gln Leu Lys Lys Lys  
1 5 10

## (2) INFORMATION FOR SEQ ID NO:181:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 11 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.350"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

Lys Lys Lys Trp Leu Ile Gln Leu Lys Lys Lys  
 1                      5                      10

## (2) INFORMATION FOR SEQ ID NO:182:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.351"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

Lys Lys Trp Leu Ile Gln Leu Phe Lys Lys  
 1                      5                      10

## (2) INFORMATION FOR SEQ ID NO:183:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 11 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "XMP.352"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site

(B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

Lys Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.353"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.354"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1  
 (D) OTHER INFORMATION: /label= Acetylated  
 /note= "Position 1 is acetylated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.355"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.356"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: 1  
 (D) OTHER INFORMATION: /label= Acetylated  
 /note= "Position 1 is acetylated"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

Pro Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 10 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "XMP.357"

(ix) FEATURE:  
 (A) NAME/KEY: Modified-site  
 (B) LOCATION: C-Terminus  
 (D) OTHER INFORMATION: /label= Amidation  
 /note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

Lys Trp Leu Ile Gln Leu Phe His Lys Pro



1

5

10

## (2) INFORMATION FOR SEQ ID NO:139:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.358"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

Lys Lys Trp Leu Ile Gln Leu Phe His Lys Pro  
 1 5 10

## (2) INFORMATION FOR SEQ ID NO:190:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "XMP.359"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (C) OTHER INFORMATION: /label= D-Cys  
/note= "Position 1 is D-cysteine."

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

Cys Trp Leu Ile Gln Leu Phe His Lys Lys  
 1 5 10

## (2) INFORMATION FOR SEQ ID NO:191:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: circular

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.360"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1 & 9
- (C) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1 & 9 are D-lysine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (C) OTHER INFORMATION: /label= D-Cys  
/note= "Position 2 is D-cysteine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

Lys Cys Leu Ile Gln Leu Phe Cys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 9 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: circular

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "KMP.361"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1 & 9
- (C) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1 & 9 are D-lysine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

Lys Cys Leu Ile Gln Leu Phe Cys Lys  
1 5

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 11 amino acids

- (B) TYPE: amino acid
- (D) TOPOLOGY: circular

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "KMP.362"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1 & 11
- (C) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1 & 11 are D-lysine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

|     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Cys | Leu | Ile | Gln | Leu | Phe | Cys | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "KMP.363"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1, 9 & 10
- (C) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1, 9 & 10 are D-lysine."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 2
- (C) OTHER INFORMATION: /label= D-Trp  
/note= "Position 2 is D-tryptophan."

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |

(2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.364"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1
  - (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1, 9 & 10
  - (C) OTHER INFORMATION: /label= D-Lys  
/note= "Positions 1, 9 & 10 are D-lysine."
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 2
  - (C) OTHER INFORMATION: /label= D-Trp  
/note= "Position 2 is D-tryptophan."
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:
 

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Gln | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |

## (2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.365"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1-10
  - (D) OTHER INFORMATION: /label= D-Amino Acids  
/note= "Positions 1-10 are D-amino acids"
- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation

/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.366"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1-10
- (D) OTHER INFORMATION: /label= D-Amino Acids  
/note= "Positions 1-10 are D-amino acids"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.367"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1-10
- (D) OTHER INFORMATION: /label= D-Amino Acids  
/note= "Positions 1-10 are D-amino acids"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

Lys Lys His Phe Leu Gln Ile Leu Trp Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:199:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "KMP.353"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1
  - (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1-10
  - (D) OTHER INFORMATION: /label= D-Amino Acids  
/note= "Positions 1-10 are D-amino acids"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

Lys Lys His Phe Leu Gln Ile Leu Trp Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc\_feature
  - (D) OTHER INFORMATION: "KMP.359"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 5
  - (D) OTHER INFORMATION: /label= Orn

"KMP.353" "KMP.359"

/note= "Position 5 is Ornithine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Xaa | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.370"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 5
  - (D) OTHER INFORMATION: /label= Orn  
/note= "Position 5 is Ornithine"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: 1
  - (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

- (ix) FEATURE:
  - (A) NAME/KEY: Modified-site
  - (B) LOCATION: C-Terminus
  - (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

|     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Trp | Leu | Ile | Xaa | Leu | Phe | His | Lys | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 10 amino acids
  - (B) TYPE: amino acid
  - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:
  - (A) NAME/KEY: misc feature
  - (D) OTHER INFORMATION: "XMP.371"

(ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /label= Dbu  
/note= "Position 5 is Diaminobutyric acid"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys  
1 5 10

## (2) INFORMATION FOR SEQ ID NO:203:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc feature
- (D) OTHER INFORMATION: "XMP.372"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 5
- (D) OTHER INFORMATION: /label= Dbu  
/note= "Position 5 is Diaminobutyric acid"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

## (ix) FEATURE:

- (A) NAME/KEY: Modified-site
- (B) LOCATION: C-Terminus
- (D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

Lys Trp Leu Ile Xaa Leu Phe His Lys Lys  
1 5 10

## (2) INFORMATION FOR SEQ ID NO:204:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: peptide

## (ix) FEATURE:

- (A) NAME/KEY: misc\_feature



(D) OTHER INFORMATION: "XMP.373"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: 1  
(D) OTHER INFORMATION: /label= Acetylated  
/note= "Position 1 is acetylated"

(ix) FEATURE:

(A) NAME/KEY: Modified-site  
(B) LOCATION: C-Terminus  
(D) OTHER INFORMATION: /label= Amidation  
/note= "The C-Terminus is Amidated"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

Lys Trp Leu Ile Gln Leu Phe His Lys Lys  
1 5 10

(2) INFORMATION FOR SEQ ID NO:205:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 1813 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(ix) FEATURE:

(A) NAME/KEY: CDS  
(B) LOCATION: 31..1491

(ix) FEATURE:

(A) NAME/KEY: mat\_peptide  
(B) LOCATION: 124..1491

(ix) FEATURE:

(A) NAME/KEY: misc\_feature  
(D) OTHER INFORMATION: "rBPI"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

|                                                                  |     |
|------------------------------------------------------------------|-----|
| CAGGCCTTGA GGTTTTGGCA GCTCTGGAGG ATG AGA GAG AAC ATG GCC AGG GGC | 54  |
| Met Arg Glu Asn Met Ala Arg Gly                                  |     |
| -31 -30 -25                                                      |     |
| CCT TGC AAC GCG CCG AGA TGG GTG TCC CTG ATG GTG CTC GTC GCC ATA  | 102 |
| Pro Cys Asn Ala Pro Arg Trp Val Ser Leu Met Val Leu Val Ala Ile  |     |
| -20 -15 -10                                                      |     |
| GGC ACC GCC GTG ACA GCG GCC GTC AAC CCT GGC GTC GTG GTC AGG ATC  | 150 |
| Gly Thr Ala Val Thr Ala Ala Val Asn Pro Gly Val Val Val Arg Ile  |     |
| -5 1 5                                                           |     |
| TCC CAG AAG GGC CTG GAC TAC GCC AGC CAG CAG GGG ACG GCC GCT CTG  | 198 |
| Ser Gln Lys Gly Leu Asp Tyr Ala Ser Gln Gln Gly Thr Ala Ala Leu  |     |
| 10 15 20 25                                                      |     |
| CAG AAG GAG CTG AAG AGG ATC AAG ATT CCT GAC TAC TCA GAC AGC TTT  | 246 |
| Gln Lys Glu Leu Lys Arg Ile Lys Ile Pro Asp Tyr Ser Asp Ser Phe  |     |
| 30 35 40                                                         |     |

|                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |      |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------|
| AAG<br>Lys        | ATC<br>Ile        | AAG<br>Lys        | CAT<br>His<br>45  | CTT<br>Leu        | GGG<br>Gly        | AAG<br>Lys        | GGG<br>Gly        | CAT<br>His<br>50  | TAT<br>Tyr        | AGC<br>Ser        | TTC<br>Phe        | TAC<br>Tyr        | AGC<br>Ser<br>55  | ATG<br>Met        | GAC<br>Asp        | 294  |
| ATC<br>Ile        | CGT<br>Arg        | GAA<br>Glu<br>60  | TTC<br>Phe        | CAG<br>Gln        | CTT<br>Leu        | CCC<br>Pro        | AGT<br>Ser<br>65  | TCC<br>Ser        | CAG<br>Gln        | ATA<br>Ile        | AGC<br>Ser        | ATG<br>Met<br>70  | GTG<br>Val        | CCC<br>Pro        | AAT<br>Asn        | 342  |
| GTG<br>Val        | GGC<br>Gly<br>75  | CTT<br>Leu        | AAG<br>Lys        | TTC<br>Phe        | TCC<br>Ser        | ATC<br>Ile<br>80  | AGC<br>Ser        | AAC<br>Asn        | GCC<br>Ala        | AAT<br>Asn        | ATC<br>Ile<br>85  | AAG<br>Lys        | ATC<br>Ile        | AGC<br>Ser        | GGG<br>Gly        | 390  |
| AAA<br>Lys<br>90  | TGG<br>Trp        | AAG<br>Lys        | GCA<br>Ala        | CAA<br>Gln        | AAG<br>Lys<br>95  | AGA<br>Arg        | TTC<br>Phe        | TTA<br>Leu        | AAA<br>Lys        | ATG<br>Met<br>100 | AGC<br>Ser        | GGC<br>Gly        | AAT<br>Asn        | TTT<br>Phe        | GAC<br>Asp<br>105 | 438  |
| CTG<br>Leu        | AGC<br>Ser        | ATA<br>Ile        | GAA<br>Glu        | GGC<br>Gly<br>110 | ATG<br>Met        | TCC<br>Ser        | ATT<br>Ile        | TCG<br>Ser        | GCT<br>Ala<br>115 | GAT<br>Asp        | CTG<br>Leu        | AAG<br>Lys        | CTG<br>Leu        | GGC<br>Gly<br>120 | AGT<br>Ser        | 486  |
| AAC<br>Asn        | CCC<br>Pro        | ACG<br>Thr        | TCA<br>Ser<br>125 | GGC<br>Gly        | AAG<br>Lys        | CCC<br>Pro        | ACC<br>Thr        | ATC<br>Ile<br>130 | ACC<br>Thr        | TGC<br>Cys        | TCC<br>Ser        | AGC<br>Ser        | TGC<br>Cys<br>135 | AGC<br>Ser        | AGC<br>Ser        | 534  |
| CAC<br>His        | ATC<br>Ile        | AAC<br>Asn<br>140 | AGT<br>Ser        | GTC<br>Val        | CAC<br>His        | GTG<br>Val        | CAC<br>His<br>145 | ATC<br>Ile        | TCA<br>Ser        | AAG<br>Lys        | AGC<br>Ser        | AAA<br>Lys<br>150 | GTC<br>Val        | GGG<br>Gly        | TGG<br>Trp        | 582  |
| CTG<br>Leu        | ATC<br>Ile<br>155 | CAA<br>Gln        | CTC<br>Leu        | TTC<br>Phe        | CAC<br>His        | AAA<br>Lys<br>160 | AAA<br>Lys        | ATT<br>Ile        | GAG<br>Glu        | TCT<br>Ser        | GCG<br>Ala<br>165 | CTT<br>Leu        | CGA<br>Arg        | AAC<br>Asn        | AAG<br>Lys        | 630  |
| ATG<br>Met<br>170 | AAC<br>Asn        | AGC<br>Ser        | CAG<br>Gln        | GTC<br>Val        | TGC<br>Cys<br>175 | GAG<br>Glu        | AAA<br>Lys        | GTG<br>Val        | ACC<br>Thr        | AAT<br>Asn<br>180 | TCT<br>Ser        | GTA<br>Val        | TCC<br>Ser        | TCC<br>Ser        | AAG<br>Lys<br>185 | 678  |
| CTG<br>Leu        | CAA<br>Gln        | CCT<br>Pro        | TAT<br>Tyr<br>190 | TTC<br>Phe        | CAG<br>Gln        | ACT<br>Thr        | CTG<br>Leu        | CCA<br>Pro        | GTA<br>Val<br>195 | ATG<br>Met        | ACC<br>Thr        | AAA<br>Lys        | ATA<br>Ile        | GAT<br>Asp<br>200 | TCT<br>Ser        | 726  |
| GTG<br>Val        | GCT<br>Ala        | GGA<br>Gly        | ATC<br>Ile<br>205 | AAC<br>Asn        | TAT<br>Tyr        | GGT<br>Gly        | CTG<br>Leu        | GTG<br>Val<br>210 | GCA<br>Ala        | CCT<br>Pro        | CCA<br>Pro        | GCA<br>Ala        | ACC<br>Thr<br>215 | ACG<br>Thr        | GCT<br>Ala        | 774  |
| GAG<br>Glu        | ACC<br>Thr        | CTG<br>Leu<br>220 | GAT<br>Asp        | GTA<br>Val        | CAG<br>Gln        | ATG<br>Met        | AAG<br>Lys<br>225 | GGG<br>Gly        | GAG<br>Glu        | TTT<br>Phe        | TAC<br>Tyr        | AGT<br>Ser<br>230 | GAG<br>Glu        | AAC<br>Asn        | CAC<br>His        | 822  |
| CAC<br>His        | AAT<br>Asn<br>235 | CCA<br>Pro        | CCT<br>Pro        | CCC<br>Pro        | TTT<br>Phe        | GCT<br>Ala<br>240 | CCA<br>Pro        | CCA<br>Pro        | GTG<br>Val        | ATG<br>Met        | GAG<br>Glu<br>245 | TTT<br>Phe        | CCC<br>Pro        | GCT<br>Ala        | GCC<br>Ala        | 870  |
| CAT<br>His<br>250 | GAC<br>Asp        | CGC<br>Arg        | ATG<br>Met        | GTA<br>Val        | TAC<br>Tyr<br>255 | CTG<br>Leu        | GGC<br>Gly        | CTC<br>Leu        | TCA<br>Ser        | GAC<br>Asp<br>260 | TAC<br>Tyr        | TTC<br>Phe        | TTC<br>Phe        | AAC<br>Asn        | ACA<br>Thr<br>265 | 918  |
| GCC<br>Ala        | GGG<br>Gly        | CTT<br>Leu        | GTA<br>Val<br>270 | TAC<br>Tyr        | CAA<br>Gln        | GAG<br>Glu        | GCT<br>Ala        | GGG<br>Gly<br>275 | GTC<br>Val        | TTG<br>Leu        | AAG<br>Lys        | ATG<br>Met        | ACC<br>Thr<br>280 | CTT<br>Leu<br>285 | AGA<br>Arg        | 966  |
| GAT<br>Asp        | GAC<br>Asp        | ATG<br>Met        | ATT<br>Ile<br>285 | CCA<br>Pro        | AAG<br>Lys        | GAG<br>Glu        | TCC<br>Ser        | AAA<br>Lys<br>290 | TTT<br>Phe        | CGA<br>Arg        | CTG<br>Leu        | ACA<br>Thr<br>295 | ACC<br>Thr<br>300 | AAG<br>Lys        | TTC<br>Phe        | 1014 |

|                                                                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|--------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| TTT                                                                | GGA | ACC | TTC | CTA | CCT | GAG | GTG | GCC | AAG | AAG | TTT | CCC | AAC | ATG | AAG | 1062 |
| Phe                                                                | Gly | Thr | Phe | Leu | Pro | Glu | Val | Ala | Lys | Lys | Phe | Pro | Asn | Met | Lys |      |
|                                                                    |     | 300 |     |     |     |     | 305 |     |     |     |     | 310 |     |     |     |      |
| ATA                                                                | CAG | ATC | CAT | GTC | TCA | GCC | TCC | ACC | CCG | CCA | CAC | CTG | TCT | GTG | CAG | 1110 |
| Ile                                                                | Gln | Ile | His | Val | Ser | Ala | Ser | Thr | Pro | Pro | His | Leu | Ser | Val | Gln |      |
|                                                                    |     | 315 |     |     |     |     | 320 |     |     |     |     | 325 |     |     |     |      |
| CCC                                                                | ACC | GGC | CTT | ACC | TTC | TAC | CCT | GCC | GTG | GAT | GTC | CAG | GCC | TTT | GCC | 1153 |
| Pro                                                                | Thr | Gly | Leu | Thr | Phe | Tyr | Pro | Ala | Val | Asp | Val | Gln | Ala | Phe | Ala |      |
|                                                                    |     | 330 |     |     |     | 335 |     |     |     | 340 |     |     |     |     | 345 |      |
| GTC                                                                | CTC | CCC | AAC | TCC | TCC | CTG | GCT | TCC | CTC | TTC | CTG | ATT | GGC | ATG | CAC | 1206 |
| Val                                                                | Leu | Pro | Asn | Ser | Ser | Leu | Ala | Ser | Leu | Phe | Leu | Ile | Gly | Met | His |      |
|                                                                    |     |     |     | 350 |     |     |     |     | 355 |     |     |     |     | 360 |     |      |
| ACA                                                                | ACT | GGT | TCC | ATG | GAG | GTC | AGC | GCC | GAG | TCC | AAC | AGG | CTT | GTT | GGA | 1254 |
| Thr                                                                | Thr | Gly | Ser | Met | Glu | Val | Ser | Ala | Glu | Ser | Asn | Arg | Leu | Val | Gly |      |
|                                                                    |     |     | 365 |     |     |     |     | 370 |     |     |     |     | 375 |     |     |      |
| GAG                                                                | CTC | AAG | CTG | GAT | AGG | CTG | CTC | CTG | GAA | CTG | AAG | CAC | TCA | AAT | ATT | 1302 |
| Glu                                                                | Leu | Lys | Leu | Asp | Arg | Leu | Leu | Leu | Glu | Leu | Lys | His | Ser | Asn | Ile |      |
|                                                                    |     | 380 |     |     |     |     | 385 |     |     |     |     | 390 |     |     |     |      |
| GGC                                                                | CCC | TTC | CCG | GTT | GAA | TTG | CTG | CAG | GAT | ATC | ATG | AAC | TAC | ATT | GTA | 1350 |
| Gly                                                                | Pro | Phe | Pro | Val | Glu | Leu | Leu | Gln | Asp | Ile | Met | Asn | Tyr | Ile | Val |      |
|                                                                    |     | 395 |     |     |     | 400 |     |     |     |     | 405 |     |     |     |     |      |
| CCC                                                                | ATT | CTT | GTG | CTG | CCC | AGG | GTT | AAC | GAG | AAA | CTA | CAG | AAA | GGC | TTC | 1398 |
| Pro                                                                | Ile | Leu | Val | Leu | Pro | Arg | Val | Asn | Glu | Lys | Leu | Gln | Lys | Gly | Phe |      |
|                                                                    |     | 410 |     |     |     | 415 |     |     |     | 420 |     |     |     |     | 425 |      |
| CCT                                                                | CTC | CCG | ACG | CCG | GCC | AGA | GTC | CAG | CTC | TAC | AAC | GTA | GTG | CTT | CAG | 1446 |
| Pro                                                                | Leu | Pro | Thr | Pro | Ala | Arg | Val | Gln | Leu | Tyr | Asn | Val | Val | Leu | Gln |      |
|                                                                    |     |     |     | 430 |     |     |     | 435 |     |     |     |     |     | 440 |     |      |
| CCT                                                                | CAC | CAG | AAC | TTC | CTG | CTG | TTC | GGT | GCA | GAC | GTT | GTC | TAT | AAA |     | 1491 |
| Pro                                                                | His | Gln | Asn | Phe | Leu | Leu | Phe | Gly | Ala | Asp | Val | Val | Tyr | Lys |     |      |
|                                                                    |     |     | 445 |     |     |     |     | 450 |     |     |     |     | 455 |     |     |      |
| TGAAGGCACC AGGGGTGCCG GGGGCTGTCA GCCGCACCTG TTCCTGATGG GCTGTGGGGC  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1551 |
| ACCGGCTGCC TTTCCCCAGG GAATCCTCTC CAGATCTTAA CCAAGAGCCC CTTGCAAACCT |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1611 |
| TCTTCGACTC AGATTCAGAA ATGATCTAAA CACGAGGAAA CATTATTCAT TGGAAAAGTG  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1671 |
| CATGGTGTGT ATTTTAGGGA TTATGAGCTT CTTTCAAGGG CTAAGGCTGC AGAGATATTT  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1731 |
| CCTCCAGGAA TCGTGTTTCA ATTGTAACCA AGAAATTTCC ATTTGTGCTT CATGAAAAAA  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1791 |
| AACTTCTGGT TTTTTTCAIG TG                                           |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 1813 |

## (2) INFORMATION FOR SEQ ID NO:206:

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

## (ii) MOLECULE TYPE: protein

## (xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

|            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Met<br>-31 | Arg<br>-30 | Glu        | Asn        | Met        | Ala        | Arg<br>-25 | Gly        | Pro        | Cys        | Asn        | Ala<br>-20 | Pro        | Arg        | Trp        | Val        |
| Ser<br>-15 | Leu        | Met        | Val        | Leu        | Val<br>-10 | Ala        | Ile        | Gly        | Thr        | Ala<br>-5  | Val        | Thr        | Ala        | Ala        | Val<br>1   |
| Asn        | Pro        | Gly        | Val<br>5   | Val        | Val        | Arg        | Ile        | Ser<br>10  | Gln        | Lys        | Gly        | Leu        | Asp<br>15  | Tyr        | Ala        |
| Ser        | Gln        | Gln<br>20  | Gly        | Thr        | Ala        | Ala        | Leu<br>25  | Gln        | Lys        | Glu        | Leu        | Lys<br>30  | Arg        | Ile        | Lys        |
| Ile        | Pro<br>35  | Asp        | Tyr        | Ser        | Asp        | Ser<br>40  | Phe        | Lys        | Ile        | Lys        | His<br>45  | Leu        | Gly        | Lys        | Gly        |
| His<br>50  | Tyr        | Ser        | Phe        | Tyr        | Ser<br>55  | Met        | Asp        | Ile        | Arg        | Glu<br>60  | Phe        | Gln        | Leu        | Pro        | Ser<br>65  |
| Ser        | Gln        | Ile        | Ser        | Met<br>70  | Val        | Pro        | Asn        | Val        | Gly<br>75  | Leu        | Lys        | Phe        | Ser        | Ile<br>80  | Ser        |
| Asn        | Ala        | Asn        | Ile<br>85  | Lys        | Ile        | Ser        | Gly        | Lys<br>90  | Trp        | Lys        | Ala        | Gln        | Lys<br>95  | Arg        | Phe        |
| Leu        | Lys        | Met<br>100 | Ser        | Gly        | Asn        | Phe        | Asp<br>105 | Leu        | Ser        | Ile        | Glu        | Gly<br>110 | Met        | Ser        | Ile        |
| Ser        | Ala<br>115 | Asp        | Leu        | Lys        | Leu        | Gly<br>120 | Ser        | Asn        | Pro        | Thr        | Ser<br>125 | Gly        | Lys        | Pro        | Thr        |
| Ile<br>130 | Thr        | Cys        | Ser        | Ser        | Cys<br>135 | Ser        | Ser        | His        | Ile        | Asn<br>140 | Ser        | Val        | His        | Val        | His<br>145 |
| Ile        | Ser        | Lys        | Ser        | Lys<br>150 | Val        | Gly        | Trp        | Leu        | Ile<br>155 | Gln        | Leu        | Phe        | His        | Lys<br>160 | Lys        |
| Ile        | Glu        | Ser        | Ala<br>165 | Leu        | Arg        | Asn        | Lys        | Met<br>170 | Asn        | Ser        | Gln        | Val        | Cys<br>175 | Glu        | Lys        |
| Val        | Thr        | Asn<br>180 | Ser        | Val        | Ser        | Ser        | Lys<br>185 | Leu        | Gln        | Pro        | Tyr        | Phe<br>190 | Gln        | Thr        | Leu        |
| Pro        | Val<br>195 | Met        | Thr        | Lys        | Ile        | Asp<br>200 | Ser        | Val        | Ala        | Gly        | Ile<br>205 | Asn        | Tyr        | Gly        | Leu        |
| Val<br>210 | Ala        | Pro        | Pro        | Ala        | Thr<br>215 | Thr        | Ala        | Glu        | Thr        | Leu<br>220 | Asp        | Val        | Gln        | Met        | Lys<br>225 |
| Gly        | Glu        | Phe        | Tyr        | Ser<br>230 | Glu        | Asn        | His        | His        | Asn<br>235 | Pro        | Pro        | Pro        | Phe        | Ala<br>240 | Pro        |
| Pro        | Val        | Met        | Glu<br>245 | Phe        | Pro        | Ala        | Ala        | His<br>250 | Asp        | Arg        | Met        | Val        | Tyr<br>255 | Leu        | Gly        |
| Leu        | Ser        | Asp<br>260 | Tyr        | Phe        | Phe        | Asn        | Thr<br>265 | Ala        | Gly        | Leu        | Val        | Tyr<br>270 | Gln        | Glu        | Ala        |
| Gly        | Val<br>275 | Leu        | Lys        | Met        | Thr        | Leu<br>280 | Arg        | Asp        | Asp        | Met        | Ile<br>285 | Pro        | Lys        | Glu        | Ser        |
| Lys<br>290 | Phe        | Arg        | Leu        | Thr        | Thr<br>295 | Lys        | Phe        | Phe        | Gly        | Thr<br>300 | Phe        | Leu        | Pro        | Glu        | Val<br>305 |

Ala Lys Lys Phe Pro Asn Met Lys Ile Gln Ile His Val Ser Ala Ser  
 310 315 320

Thr Pro Pro His Leu Ser Val Gln Pro Thr Gly Leu Thr Phe Tyr Pro  
 325 330 335

Ala Val Asp Val Gln Ala Phe Ala Val Leu Pro Asn Ser Ser Leu Ala  
 340 345 350

Ser Leu Phe Leu Ile Gly Met His Thr Thr Gly Ser Met Glu Val Ser  
 355 360 365

Ala Glu Ser Asn Arg Leu Val Gly Glu Leu Lys Leu Asp Arg Leu Leu  
 370 375 380 385

Leu Glu Leu Lys His Ser Asn Ile Gly Pro Phe Pro Val Glu Leu Leu  
 390 395 400

Gln Asp Ile Met Asn Tyr Ile Val Pro Ile Leu Val Leu Pro Arg Val  
 405 410 415

Asn Glu Lys Leu Gln Lys Gly Phe Pro Leu Pro Thr Pro Ala Arg Val  
 420 425 430

Gln Leu Tyr Asn Val Val Leu Gln Pro His Gln Asn Phe Leu Leu Phe  
 435 440 445

Gly Ala Asp Val Val Tyr Lys  
 450 455

## (2) INFORMATION FOR SEQ ID NO:207:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "core sequence LIQL"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

Leu Ile Gln Leu  
 1

## (2) INFORMATION FOR SEQ ID NO:208:

- (i) SEQUENCE CHARACTERISTICS:  
 (A) LENGTH: 4 amino acids  
 (B) TYPE: amino acid  
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

- (ix) FEATURE:  
 (A) NAME/KEY: misc\_feature  
 (D) OTHER INFORMATION: "core sequence IQLF"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

Ile Gln Leu Phe

1

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "core sequence WLIQL"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

Trp Leu Ile Gln Leu

1

5

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 5 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "core sequence LIQLF"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

Leu Ile Gln Leu Phe

1

5

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(ix) FEATURE:

- (A) NAME/KEY: misc\_feature
- (D) OTHER INFORMATION: "core sequence WLIQLF"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

Trp Leu Ile Gln Leu Phe

1

5